Online Appendix 2. PCR primers.
Primers for modern DNA:

Marker	Fragment	For primer
CoI/II	barcode region (LCO-HCO)	GGTCAACAAATCATAAAGATATTGG
	second part (Pat-Jerry)	CAACAYTTATTTTGATTTTTTGG
	third part (C1-J-2783/C2-N-3812)	TAGGATTAGCTGGAATACC
16S		CCCGCCTGTTTATCAAAAACAT
Aact		TGATTTTAAGCTGCACAAGGA
ArgK		TNACYGARKCCCARTAYAAG
Cad	first half	GGNGTNACNACNGCNTGYTTYGARCC
	second half	KGGATTYTCNGAYAAACAAATNGC
Cat		TCAAGACTGCGATTCAAACA
Cmdh	first half	GAYATNGCNCCNATGATGGGNGT
	second half	GCNCCNTCWATNCCNAAAGA
	Heliconius-specific second half	YAAAGTDGCHCGBAAGGATG
Ddc		TGGYTICAYGTIGAYGCNGCNTAYGC
Dpp	(dpp-f34/dpp-r327)	AGAGAACGTGGCGAGACACTG
EF1α	first half (Starsky-Monica)	CACATYAACATTGTCGTSATYGG
	second half (AlF-EFrcM4)	GAGGAAATYAARAARGAAG
gapdh		AARGCTGGRGCTGAATATGT
	Heliconius-specific	GAWGGKGGTGCYAAGAARGT
GlyRS		AGACACGTTTTAACATTT
Hcl		GCCGTAAAAGCAACCAC
Hsp40		CACAATGGTCCAGGCGCT
Idh		GGWGAYGARATGACNAGRATHATHTGG
	Heliconius-specific	TTTRGGRATGGAAWATCGTG
Lm		TCCAGAATGCTATGCTTGTG
Rps2		ATCWCGYGGTGGYGATAGAG
Rps5		ATGGCNGARGARAAYTGGAAYGA
Tada3		GTGGAATGGGAGGAAGTGT
Trh		GATGCCACGTCCGTTAGAGA
Vas		ATCACAAGACTTCTCCGTTT
Wg		GARTGYAARTGYCAYGGYATGTCTGG

Primers for historical DNA:

Col/II	Ron-Nancy	GGA GCY CCW GAT ATA GCT TTC CC
	Brian-Mila	CTT CTA TAT TAT GAA GAT TAG G
	Jerry-Mila	C AAC AYT TAT TTT GAT TTT TTG G
	Brian-Pat	
EF1α	part1	CACATYAACATTGTCGTSATYGG
	part3	TcAAgAACATGATcACyGG

Rev primer	Tm (°C)	Reference
TAAACTTCAGGGTGACCAAAAAATCA	50	Wahlberg et al. 2009
ATCCATTACATATAATCTGCCATA	50	Wahlberg et al. 2010
CATTAGAAGTAATTGCTAATTTACTA	52	Beltran et al. 2007
CCCTCCGGTTTGAACTCAGATC	50	Beltran et al. 2007
ACTTACAATTTTTCAATCAT	53	Salazar et al. 2010
TTGATSAGYTCRGCGATG	55	Wahlberg and Wheat 2008
CATTCWGCKGCWACTGTATC	56	Wahlberg and Wheat 2008
TTRTTNGGNARYTGNCCNCCCAT	56	Wahlberg and Wheat 2008
TGTCTTCAGTTTGTCCACT	51	Salazar et al. 2010
AAYTGNGTRGATGARTGRTTNCC	55	Wahlberg and Wheat 2008
AGNCCYTCNACDATYTTCCAYTT	50	Wahlberg and Wheat 2008
CCYAAGAACCARTCCCTCAT	50	
CCCATNGTNACYTCYTC	48	Wahlberg and Wheat 2008
GAGGAAAGTTGCGTAGGAACG	58	Beltran et al. 2007
CATRTTGTCKCCGTGCCARCC	60	Wahlberg and Wheat 2008
ACAGCVACKGTYTGYCTCATRTC	50	Wahlberg and Wheat 2008
GWTTGAATGTACTTGATRAGRTC	53	Wahlberg and Wheat 2008
GATMCCWGCAGCRGCATCAA	55	
ATAGTGAATTCTCTAACTCT	53	Salazar et al. 2010
AACATATAAATTACACCAAA	48	Salazar et al. 2010
TCACTGCCTTCTCTCTTGAA	60	Salazar et al. 2010
TTYTTRCAIGCCCANACRAANCCNCC	55	Wahlberg and Wheat 2008
CCATRTCGTCRATYARCCTATG	50	
TTAATTCAGATGTAAGCTCT	50	Salazar et al. 2010
ATGRGGCTTKCCRATCTTGT	52	Wahlberg and Wheat 2008
CGGTTRGAYTTRGCAACACG	55	Wahlberg and Wheat 2008
TTTGCGCGGGTAAATTTGTT	54	Salazar et al. 2010
CTATGAGCTTGTTGAATACC	50	Salazar et al. 2010
TTTTCTTCTTAAGTTACTGG	50	Salazar et al. 2010
ACTICGCARCACCARTGGAATGTRCA	52	Beltran et al. 2007

CCT GGT AAA ATT AAA ATA TAA ACT TC	50		Wahlberg et al. 2009
ATT AAT CCT GTA AAT AAW GG	50		Wahlberg et al. 2009
		53	Wahlberg et al. 2009
A TCC ATT ACA TAT AAT CTG CCA TA		53	Wahlberg et al. 2009
TrScgGTYTCGAAcTTCCA		58	
GARGAyACTTCcTTcTTgA		51	